

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-17. (Canceled)

18. (Currently Amended) The method according to claim [[17]] 33, wherein said transit peptide coding sequence is a Pea ribulose-1-5-bisphosphate carboxylase small subunit transit peptide coding sequence.

19. (Currently Amended) The method according to claim [[17]] 33, wherein said promoter is a Cassava vein mosaic Virus (CVMV) promoter.

20. (Currently Amended). The method according to claim [[17]] 33, wherein said MnSOD coding sequence is further operably linked to a NOS terminator.

21-22. (Canceled)

23. (Currently amended) The transgenic rice variety produced by the method according to claim [[17]] 33, wherein the mature transgenic plants of said rice variety display increased superoxide dismutase (SOD) activity as compared to a corresponding plant variety without said expression vector of step (a) in the presence of environmental stress.

24. (Currently Amended) The transgenic rice variety according to claim 23, A method for producing a transgenic Indica rice variety, comprising:

- a. Constructing an expression vector for plant transformation that comprises a promoter, a Manganese superoxide dismutase (MnSOD) coding sequence derived from Nicotiana

Plumbaginicolia L., and a transit peptide coding sequence, wherein the promoter, the transit peptide coding sequence and the MnSOD coding sequence are operably linked;

- b. Stably transforming rice calli of said indica rice variety with the vector constructed in step (a);
- c. Regenerating the transformed calli into mature transgenic plants of said rice variety, wherein the mature transgenic plants of said rice variety display increased superoxide dismutase (SOD) activity as compared to a corresponding plant variety without said expression vector of step (a) in the presence of environmental stress, and

wherein said transgenic rice variety is selected from the group consisting of Godavari 8 and Salween 2, and produces 30-95% increase in superoxide dismutase (SOD) activity.

25. (Previously presented) The method according to claim [[17]] 33, wherein said transgenic plants display increased yield as compared to that of non-transgenic plants under environmental stress conditions, increased tolerance as compared to that of non-transgenic plants to pathogen attack, and play a role in the food industry by increasing a shelf life of said rice variety as compared to that of non-transgenic plants.

26-28. (Canceled)

29. (Previously presented) The method according to claim 23, wherein the environmental stress is increased methylviologen concentration.

30. (Currently Amended) The method of claim [[17]] 33, wherein the mature transgenic plants of said variety stably expresses the MnSOD coding sequence within a targeted organelle of the transit peptide.

31. (Previously presented) The method of claim 30, wherein the targeted organelle is chloroplast.

32. (Currently Amended) The method of claim [[17]] 33, wherein the mature transgenic plants of said rice variety in step (c) is capable of producing a progeny plant of a subsequent generation expressing the MnSOD coding sequence within the targeted organelle of the transit peptide.

33. (Previously presented) A method for producing a transgenic indica rice variety comprising:

- a. Constructing an expression vector for plant transformation that comprises a promoter, a Manganese superoxide dismutase (MnSOD) coding sequence derived from *Nicotiana Plumbaginifolia L.*, and a transit peptide coding sequence, wherein the promoter, the transit peptide coding sequence and the MnSOD coding sequence are operably linked;
- b. Transforming rice calli of said indica rice variety with the vector constructed in step (a);
- c. Regenerating the transformed calli into mature transgenic plants of indica rice variety, wherein the transgenic indica rice variety is selected from the group consisting of Godavari 8 and Salween 2.